

AMERICAN EDUCATIONAL MONTHLY.

AUGUST, 1875.

THE PROJECT OF A NATIONAL UNIVERSITY.

THE Universities of Europe, as developed since the Reformation in most of the Protestant countries, must, in spite of their shortcomings, be called the great safeguard of truly human progress. Their underlying idea is a concentration, at one place, of all the means of teaching and learning in some large portion of country. All exclusiveness, except the exclusion of incompetence, is to be kept aloof; all religious, party, and social tests in recruiting the body of teachers and learners are to be dropped; all the material means to render effective the teaching and learning of any and every science and art are to be furnished without stint; Government, Church, and society are to help the foundation, expansion, and improvement of this highest school, while they withhold all interference with its interior administration, so long as no laws of the State are violated.

This is the idea and ideal at the bottom of the best institutions of this name. According to it, every student of any one science or art should have not only a variety of teachers of the same, so as to become conversant with the different stand-

points held by the contemporaneous professionalists, but should also have every possible chance to acquire cyclopædic knowledge of all branches of learning which are auxiliary to his own branch, or which may shed light on its relations to the others. Thus he is to become something more than a professionalist—a true man. The sciences and arts themselves are to profit by such concentration. The frequent exchange of experiences, objects of study, views among professors and students, must rectify incipient errors, before they become fixed, must widen the mental horizon, engender a lively competition, render a combination of efforts by subdivision of labor manifoldly productive of results, bring hidden talents to light, and prevent fanaticism and one-sidedness.

While no single profession can excel without such concentration of means, it is perhaps the *teacher's profession* that most of all needs university culture. Through the teachers, all the beneficial results of science and art are to be spread throughout the land, and through universities alone, down through the lower grades of schools. By them general education can be raised to a higher and better efficiency.

If there is any proof needed of what universities may do for a country, we may point to Switzerland, which boasts of four. Geneva, founded in 1368; Basel, in 1439; Zurich, in 1832; and Berne, in 1834. There is no country among the civilized nations, which has less natural advantages than Switzerland. A small territory; a soil for the most part barren, and an ungenial climate; cut up into many more or less isolated valleys, which have formidable obstacles to intercommunication and intercourse with the rest of the world; a total want of iron, copper, coal, noble metals, and other important minerals; a lack of navigable rivers, except on the narrow, northern frontier; a population composed of four different nationalities, German, French, Italian, and Romanic, and confessing two principal, and many minor religious creeds, at war with each other; the hostility of all surrounding political powers—great monarchies, fearing the spread of the free institutions of Switzerland—all these impediments to popular and national thrift are overcome by the fostering care for the general expansion of learning which has characterized the Swiss government from a comparatively early age.

Owing to this care, and the concentration of scientific pursuits at a few centers, Switzerland always has had far more than its proportion of learned men, lovers of enlightenment and progress, reformers and philanthropists. In consequence of this, the earliest and most successful experiments were here made in the reform of public schools, by Fellenberg, *Pestalozzi*, *Zschocke*, *Froebel*, and others, and these institutions were raised to a high excellence. The beneficial effects of this general improvement in popular intelligence and virtue may be traced in the comparative ease with which the Switzerland of the last century, which was a sham republic, in fact a rotten aristocracy, and, in places, a boor democracy, has been changed into the most progressive democratic republic in existence, with less crime, vice, poverty, profligacy, and turbulence than any other nation; with national wealth more evenly distributed than elsewhere; with a development of industrial pursuits that, without the aid of protective duties, and in spite of the fact that almost all the raw materials must be imported, may challenge comparison; in short, with a national power and vitality which is far beyond the number of inhabitants and size of the country.

This one example—though others might be given—will be sufficient to show the various ways in which a true university education must benefit a country. By collecting within a narrow space all the most prominent men of science and art, their implements and auxiliaries, it acts like a collecting lens in both intensifying and magnifying the light of the mind. When each science and art can shed its peculiarly-colored rays side by side on all the others, the pure white light of truth will more easily result than where the rays are radiating each for itself; and thus errors may be corrected before they found a sectarian school and stubborn prejudices.

Where study is rendered easy and attractive by a variety of teachers, and by ready comparison of results with those of all the others, many persons will be gained to higher pursuits, mental efforts, and humanitarian purposes, who otherwise would continue their lower walks of life as indifferent conservatives. Their influence will be felt in the improvement of schools, and the university offers the only sufficient course of study for those who wish to raise the seminaries for teachers to a higher

standard of excellence. The science and art of teaching will thenceforth be appreciated by the people at large, teachers' salaries and stations in life will be improved, and a better and better class of persons will be attached to the teacher's calling. The course of study for teachers in the seminaries will constantly advance, and secure greater success in the education of the succeeding generations. New generations, as they come to be parents themselves, will bring with them a better home-education, and a higher appreciation of the value of schools and their purposes. The benefits resulting therefrom to all the national and individual interests need not be portrayed.

Suffice it to say—what can be easily proven—that Germany owes its present standing, its gradual rise from the incalculable decadence through and after the thirty years' war, in great part to its universities.

It is from considerations like these that the American National Teachers' Association has, for a number of years, agitated the plan of a great National University in the United States, to be located at the seat of Government, to be founded exclusively or chiefly by national means, to be independent of all sectarian and party influence, and to be established on so magnificent an endowment as to excel the universities of all the world. This plan was laid before Congress two years ago, and would already have been advanced an important step toward its execution had it not been for the public and private interference and opposition of some representatives of the existing colleges and universities. Their arguments, however, have been so thoroughly refuted by President White, of Cornell University, at the last year's meeting of the National Teachers' Association in Detroit, that, it is to be expected, public opposition, at least, to the National University scheme will die out. He has triumphantly shown that none of the existing American universities or colleges can compare with those of Germany or Switzerland, because there are too many of them; that they fail in their purposes, not from a lack of men of science and art qualified for true university teachers, but from the lack of their concentration in one or a few localities; from pecuniary want and sectarian bias, and all kinds of one-sided influence; in short, from a want of catholicity and liberality. Whoever has studied his excellent statement of facts published in the

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proceedings of the National Teachers' Association cannot help assenting to its truthfulness.

We do not claim for the plan, in its present shape before Congress, the *acme* of perfection. But, being before the people at large, it ought to be discussed far more generally and zealously than it is at present. The nation has no more important subject to consider, not excepting the Centennial Exposition. All schemes of national prosperity and aggrandizement must be based on improved popular education, and this end can be most easily and surely attained through the agency of a National University. For it is there, and there only, that our future superintendents, principals of public schools, members of boards of education, regents of State universities—in short, the future reformers of our schools, can be expected to learn the science and art of education from different standpoints, and in the light of the pedagogic experience and study of the world.

Where is the college of our three hundred that can teach our principal teachers how to teach? We do not at all belittle their merits by saying that there is no "High School of Pedagogy" in this country. Where and how have the men at the head of our normal schools qualified themselves for their profession? Why, a few of them have visited the higher institutions of learning in Europe, a few more are pupils of these, and all the rest acquired their professional knowledge and skill from books and their own experience in the school-room. What tedious, round-about ways, what a loss of precious time, how many chances of failure, to reach a goal that can be reached only by instruction in the collected wisdom of many practical and theoretical masters who represent the educational knowledge and skill of all ages! There is in some of our colleges one chair of Pedagogy, when at least ten are needed, to represent each auxiliary branch of the science and each practical excellence of the art of education, to harmonize in the mind of the learner the one-sided views and tendencies that must follow from being acquainted with the peculiar standpoint of one teacher only. And where are the libraries, the apparatus, the collections of all kinds, that alone can illustrate all scientific teaching, and render it really useful? Where is the model school of all grades, connected with the chairs of Pedagogy, in which alone practical knowledge and experimental trials can be had?

It will be conceded that in this all-important respect almost all is yet to be done; and that there is no other way of doing it but by a great national effort is simply demonstrated by the fact that we have not yet anything like a real university, because the means heretofore relied upon for the purpose were insufficient, nay, paltry in comparison with the aim to be realized. Our people have for one hundred years trusted to private benevolence, sectarian influence, and some occasional aid of the individual States, the task of creating and sustaining the institutions of higher learning. These agencies have given us a great number of schools that may, perhaps, rank with the gymnasia and *Realschulen* of Continental Europe, and are under sectarian or party influences. The few of our colleges and universities that are not, like the State University of Michigan, owe their comparative excellence to their foundation by the State, the concentration of means, and the direction of private benevolence toward a worthy object.

We cannot here expatiate on all the features of the National University bill now before Congress, but must conclude by suggesting two improvements to it. The first is a provision for the instituting of what in Germany are called *Private Dozenten*. In German universities any one who has acquired the higher academical degrees is allowed to establish himself as a teacher, without salary and appointment, depending for his livelihood on the fees for his lectures, which must be collected by the university questor like those of the ordinary and extraordinary professors. He must be accommodated with a lecture-room, and the use of all the apparatus and collections which the professors have at their command; and his lectures are considered, on the part of the State, as equally obligatory, if preferred by the students. If he succeeds in attracting large audiences, or in writing meritorious scientific works, he will be called to a professorship in some university. In this way the body of professors is recruited without governmental interference, the academical senate having a paramount influence in the choice of colleagues, the government only the honorary right of confirming their choice, which confirmation is hardly ever withheld, if the professors are firm in their decision. And thus the invaluable liberty of teaching and learning is secured, without which, it is safe to say, Germany could never have attained her present rank among the nations.

The second improvement in the bill would be a provision through which all political influence in the appointment of professors could be cut off. The first body of professors ought to be appointed through a national convention of the representatives of all the existing universities and colleges, of the National Teachers' Association, and of the National Scientific Association. This body of professors, once constituted, ought to recruit their number untrammelled by any legislative enactment or executive influence. It is hardly necessary to prove that in this manner, and in this manner only, could the body of National University professors be kept at the highest possible standard of excellence.

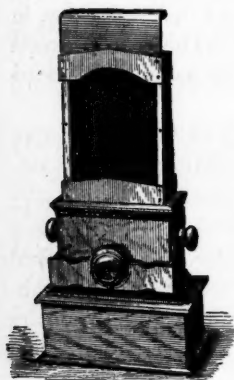
These two amendments will, if adopted, secure the hearty endorsement of the entire scheme by the remaining opponents, who fear that political and sectarian influences might attempt to strengthen themselves by the institution of the National University, with its enormous power of patronage and mental and moral effects. There is absolutely no means to firmly establish the independence of science and art, but to give the entire body of professional men the final decision over all matters pertaining to them.

A. DOUAI.

THE THAUMSCOPE.

IN the June number of the AMERICAN EDUCATIONAL MONTHLY, the writer noticed an article under the heading of "Amusement in the School-Room," which plainly stated that an educational appliance was greatly needed to take the place of the cumbrous and expensive magic lantern. Charts, prints, blackboard drawings, etc., have hitherto been poor substitutes for the brilliant and life-like representations of the screen; but the expense and the difficulty of management have so barred the way to the introduction of the magic lantern, that it is found nowhere, as an educational aid, except in the college lecture-room. This article is written with the intention of laying before teachers and the friends of education generally a description of an instrument named the Thaumscope, destined

to fill the place of the magic lantern, to be used with greater facility, and in a much wider field. This instrument had its origin in the desire of a teacher to provide for his classes some means for the representation of scientific subjects. Magic lanterns were rejected as too costly and requiring too much preparation; the opaque lanterns in the market were too inefficient to be of use; and, finally, after many mistakes and



THE THAUMASCOPE.

alterations, the Thaumoscope was contrived, answering every purpose; and this is now offered to the educational public. The general form of the Thaumoscope may be learned from the accompanying cut. It is made of finely-finished and well-seasoned black walnut, nine inches long, six inches wide, and about twenty inches high, and lined with Russia iron. It is divided into three compartments, in order to secure the minimum of heat and the maximum of light: the lamp-chamber below, with a hinged door at the back; the reflecting chamber in the middle, lined with polished metal, in the rear of which is the spring-slide for the admission of objects. In the front are the plano-convex object glasses, with a convenient adjustment for focusing. Above all is the heat-chamber, removable at pleasure, and the brass cap screen.

The whole instrument is neatly packed in a black walnut box, with a sliding cover, eleven inches high and ten inches square, which may be used as a stand for exhibition, and from which it may be removed and set up in a few moments. The weight of the whole is less than five pounds, so that the box and its contents may be carried for a long distance without inconvenience.

The reader has, no doubt, observed from the description just given, that the Thaumoscope is an *opaque* lantern—that the picture is made luminous by light shining *upon* it, and not by light shining *through* it, as in the ordinary magic lantern. The disadvantage of the light losing intensity by the distance, in accordance with the law of radiation, has been overcome by the

use of high-power lenses, by contracting the reflecting chamber, and by obtaining an overplus of illumination, thereby securing a picture on the screen bright and clear enough to be visible and interesting from every part of a large school-room.

To explain the uses of the Thaumscope, and to show how it combines efficiency with great convenience, let the reader pay an imaginary visit to the lecture-room where the writer has held his science class during the past season. The Thaumscope, packed in its box without stuffing, has been carried to the rooms with ease and safety. It is unpacked, put together, and stands about breast-high, and six feet from the screen, which is nothing more than the white-finished wall of the room. The lamps, which are about two-thirds full of Pratt's astral oil, are lighted, and the wicks are turned down very low at first, to avoid smoking the chimneys, which must be kept bright and clear. After the chimneys are replaced the wicks are turned up again, and, after the ordinary attention given to a kerosene lamp when first lighted, they will require no further care. Now a card photograph, or any small opaque picture, is placed in the slide behind the lamps, and, the lights in the room being turned down, an enlarged representation appears on the screen, which, by adjusting the focus, is brought out clearly and distinctly. The Thaumscope is now ready for use, and we cover up the lens and take out the trial picture, and proceed with the lecture. Let us say that the subject is geological—the "structure of rocks." When the lecturer finds it necessary to illustrate his remarks, the room is darkened, and photographs of remarkable formations are placed in the slide and thrown upon the screen; and if these are wanting, Lyell's or Dana's geology is opened at the required illustration; the open book is held inverted at the aperture of the lantern, and the pictures are faithfully and vividly produced in succession. Perhaps there is a mineral specimen—a crystal, for instance—that could itself be seen a few feet off. Placed in the Thaumscope, suspended by a thread, it is magically reflected on the screen, enlarged to the size of a boulder.

All this wealth of illustration is obtained at an outlay of a few cents, whereas the same pictures arranged for the magic lantern would cost, if they could be obtained at all, several hundred dollars. Thus, while the illustrations of the magic

lantern are expensive and meager in number, those of the Thaumascope are of trifling cost and innumerable.

It is surprising how satisfactorily it will exhibit an engraving or a wood-cut. A small image, a bunch of flowers or of leaves, a live insect, the face or the moving works of a watch, may be shown in the most pleasing manner.

A new use is also found for *carte-de-visites* and stereoscopic views, which are enlarged upon a disk of six feet in diameter with the most wonderful and life-like effect. Every family in the land has a stock of these, which is constantly receiving additions. They become by means of the Thaumascope a gallery of life-size pictures, never wearying the eye, and more faithful to nature than the finest painting. The writer, in his search for cheap pictures, discovered some back numbers of the *St. Nicholas Magazine*, whose pages were interspersed with hundreds of wood cuts, very clearly and beautifully done. Many of these were cut out, mounted on cards, and, when exhibited in the Thaumascope, afforded the most exquisite pleasure to a party of children who would have cared little to look at them in the magazine.

Teachers will find in the Thaumascope an invaluable assistant in awakening the interest of their pupils by illustrating recitations. It is within the means of every teacher, and it can be used for so many purposes that, when once adopted, it will never be relinquished.

The instrument and its screen can be accommodated without waste of room or trouble, and, in the words of Professor Marcy, "the time is coming when, for purposes of illustration and demonstration in the school-room, this whiteboard will rival the blackboard."

J. M. HAWKINS.



SIMPLICITY in diet is rewarded by a clear head, a good digestion, and freedom from inflammatory disease. If one desires to think and act understandingly, let him select his food with discretion, and eat it in cheerfulness.

DISEASE is the result of disobedience to the laws of life.

THE SCHOOL-BOOK WAR IN CALIFORNIA.

IN our Monthly for March, we published a rather racy correspondence from San Francisco, on the subject of the "Battle of the Books in California." From recent articles in San Francisco papers, we judge the siege has been a protracted one, and it seems to have drawn out a variety of resources, and developed some tactics not recognized in the manual of ordinary warfare.

The facts of the case, briefly stated, are these: In January last, by authority of an act of the Legislature of the State, several changes in text-books were made by the State Board of Education, but the action of the Board was set aside by the Supreme Court in the case of the "Pacific Coast Readers," and the result of this decision was to revert the school-book question back to the position it held before the January meeting of the Board took action upon it. In the meantime, as soon as it was known that changes were to be made, there was a grand rush by the agents of different publishing houses throughout the country, each one anxious to secure for his house, a portion, or all of the patronage that would result from the change. The books selected were to remain in use five years, and consequently this would be a crumb worth fighting for. A call had been issued by the State Superintendent for a meeting of the State Board of Education on June 1st. He afterwards attempted to postpone the meeting until the 8th, but it was found that such a course would be illegal, as the Superintendent has no authority to postpone a meeting after it has once been called. According to the call the meeting convened on the 1st inst., and there seems to have been a scene very like those which occur nearer home, when the guardians of the public welfare and the public money meet to devise ways by which the welfare may be promoted, and the money spent. There was the same interchange of courtesies between pot and kettle, the same endearing names, the same pretty little hints at bribery and corruption, and gentle retorts and mild disclaimers. Each member of the Board seemed to be the champion of some particular publisher, and

their zeal in some instances was so great as to give rise to the impression that they were animated by some sentiment more powerful than that of making the best possible selections for the interests of the schools.

The member who clung most tenaciously and supported most faithfully the choice of the State Superintendent, was one T. O. Crawford, Superintendent of San Joaquin county. He is described as being entirely made up of Christian graces—a living, breathing edition of John Wesley's sermons. He was loud in his denunciations of other members who had been accused of being bribed, or allowing selfish considerations to influence their choice, and even objected to allowing a member to vote, who, it was rumored, was engaged in preparing a grammar for publication. Now it happened that, by a singular circumstance, a letter written by an agent of the house of A. S. Barnes & Co., New York and Philadelphia, and intended for Mr. Crawford, by its blundering superscription—being directed to "the County Superintendent of Schools of San José, Cal."—fell into the hands of Mr. Kennedy, who occupies that position.

This rather interesting epistle reads as follows :

National Series School-Books, Published by A. S. Barnes & Co., }
New York and Philadelphia. }
A. P. Flint, Gen. Agent, 822 Chestnut street.

PHILADELPHIA, May 12, 1875.

DEAR CRAWFORD:—Your letter is at hand, saying, Come out, etc., and that chances look well, etc. ; and also letter from Allen, saying, Bars all down, and probably I will now win, etc. ; and also telegram from Eikhoff, saying, Committee not yet called, and he will advise me, etc. : and after this I really did not know what to do.

I therefore set my house in order to start to-night, and sent all letters and telegrams to the house, and said to them : " I start, unless you desire differently." I have just received a telegram saying : " Better hold off a few days, till a little more definite information arrives." So I shall wait at least till Monday evening.

Now then, Crawford, I want to say something to you frankly and confidently, because by this time we have learned to know each other. I will write you very frankly. We have telegraphed Welsh, of John G. Hodge & Co., to look after injunction and see it attended to ; and he writes, it is in the hands of lawyers, and a good show for us, etc., and that at next fight we will win. Now then, Allen writes that at next meeting of committee they will advertise for proposals, and probably we will win, etc. Allen will go for us next time, I feel sure. I have a lever on his brother, and am using it.

Now about Branch House : we have made arrangements with John G. Hodge & Co. to look after our publications especially, and when you get things

fixed, and our books in, and we hire you, as I now believe we shall, you would operate direct from their store, and letters would go there as they do now to A. S. Barnes & Co., 327 and 329 Sansome street, San Francisco. They act for us and will do so, and they are good fellows. Bonestel is as fine a man as there is; Welsh was in our employ in New York for years. Now we want you, and will arrange, I guess, after you can safely get out of committee. Of course it won't do to hire you till the Board act some way—will it, now? What I would ask you to do is this: Take the train and go to San Francisco, and go to see Welsh, and have a frank talk. Find out what has been done and what is best to be done, and operate together.

If you and he say injunction must be pressed harder, let him see the lawyers and go for it; and if anything else is desired, go for it; and in the meantime we will have our geographies out of hands of binders and printers in elegant shape. So far as Libby's cutting your head off goes, it don't amount to anything. We know him better than you, and you need not fear his threats so far as we are concerned.

If we get the adoption, we, through you, will fight for no repeal, and I guess you and Upham "can make Rome howl."

I shall come out myself, probably; if not, the senior member, A. S. Barnes; probably, myself. Now, if I don't come before you get this, please answer the following questions: First—Does it become important to proceed with injunction? Second—Does State Board act after six months' notice? Third—Is our chance bully? I don't want to stay over three weeks, and I want to come just the right time, you see, and that is cause of delay. Now, then, one more word. If you will be kind enough to go to San Francisco to see Welsh, or deem it best to drop off somewhere else, do it, and we will pay all such traveling expenses; I will guarantee that. We find the end almost reached for us—we will hope so at least.

With Bolander with us, and Allen we can get, Honest James Denman will do us the pleasure, we presume—we hope he will. I want a little deal out there once more. I feel I can do more than I did the first time; I am anxious to try, at least. I hope the ending will be well. Write me, please, now, advisedly, and do the best you can; and let me know if the meeting is to be called. How grateful I shall be to grasp your hand again, when I come out. But I stop for the present.

With kind regards, I am yours truly,

A. P. FLINT,

General Superintendent Agency Department.

This letter will give some idea of the way in which the State Board of Education, of one State at least, can be manipulated by Eastern publishers. This is not the first time that letters from school-book publishers have gone astray, and it is possible that a thorough investigation of the whole subject may expose many things, which, while they prove unpleasant to the parties implicated, may be of great benefit in preventing future complications of this sort.

Now the question is, *Did* the dictionary publishers get up that spelling mania last winter?

*THE EXPERIENCE OF AN OBJECT LESSON
TEACHER.*

A FEW years ago, a teacher graduated from a normal school where she had learned something of the Pestalozzian system, or at least had learned to give Object Lessons, and took a position in a country academy. The officers of the school, knowing that she had taken Object Lessons, insisted that at a liberal salary she should "undertake" the primary department, which she did, as time proved, in a funereal sense. The first few weeks were a too great success. When the children had astounded their parents, both by their interest in their school, and by their oracular talk of the "qualities" of fruits and minerals, and of the "parts" and "uses" of the human eye and ear, every one insisted on sending all who could possibly squeeze into the primary seats, into the primary department; and as the three trustees had each a family resembling that of the martyr John Rogers, the primary department was thrown open to all who could enter. For a few months the novelty was sustained, and with it the interest. Children mixed their baby-talk with phrases from Hugh Miller, and discoursed of physiology in the language of a medical college "fresh." Then the system became stereotyped. After chalk, charcoal was too easy to keep up the interest. The children knew the "parts" of a plant, and their "uses," with the few botanical terms necessary, "like a book." Sheep's eyes and hogs' "lights" ceased to cause a sensation, and a calf's brain, over which the poor teacher had spent a long time in preparing the lesson, became the subject of facetious personalities among the elder pupils rather than of scientific interest. The afflicted teacher ransacked the small country village for "objects," and spent the time she should have given to brain-rest in arranging the "skeleton lesson," that in time became the skeleton of her blackboard, and whose head was "Subject," whose arms were "Parts" and "Qualities," and these, written in columns below, formed the legs, like the arms, of indefinite and unequal length. The Pestalozzian system, that was to keep the vehicle of education "in pastures ever green," had rolled it into a rut as deep as that of the oldest system in use. Pupils answered listlessly,

readily, and without thought. Parents complained that their children did not take the same interest that they once did, and, to the teacher's mortification as well as relief, remanded them to the grammar department, which they should not have left. To the afflicted teacher the Pestalozzian system was fast becoming the pestiferous, and she began to look for the cause.

Her state of mind recalled the normal class in which she had learned the system, and also recalled the fact that between the professor and the principal there was a difference of opinion in regard to Object Lessons. What this difference was she scarcely remembered. She therefore consulted her normal note-book, and was glad to find in it a portion of the final address of the principal to the graduating class. This was what she had noted:

"It is because I desire the success of what is termed the Pestalozzian system of teaching that I now offer words of caution. Be careful not to run the Pestalozzian system into the ground. As a system of teaching, in the school-room sense of the term, it can be applied only to the youngest class of pupils, and should diminish as a system according to the maturity of mind—not age—of the pupil. Never attempt to teach a complete science, or any study, to a mature mind by Object Lessons.

"There is no royal road to knowledge—not even in the excellent Pestalozzian way. Pupils must study, and study *books* as well as objects, to become thorough in the acquirement of any science. It was not with reference to the men who with him had studied theology and jurisprudence that Pestalozzi spent his life and fortune in establishing a new system of education, but with reference to the infantile capabilities of the peasantry of his native country, who, having eyes, saw not—who, having ears, heard not. Keep it steadfastly in mind that it is because I desire the success of his system that I caution you. As a school system it is limited, but as a principle of teaching and of study it is unlimited—should be applied to all teaching of all things, even of theology and jurisprudence. It is the salt to be used both in preparing and in receiving mental food; but one cannot live on salt or on a large proportion of it. Or, better, it is milk for babes; but men require meat with milk—cannot live without it."

Here the "notes" abruptly ended, but the thoughts of the teacher did not. "About one-third of my pupils need the system; the remainder need the principle. Study shall be their food, 'seasoned with salt,'" she soliloquized, and planned to change her course in the management of her department, with reference to Object Lessons.

What was done, and how it was done, shall be told in due time.

M. L. SHERMAN.

EDUCATION AT ITS SOURCES.

A GREAT deal is said, and well said, and a great deal is done, and properly done, in regard to the education of children and youth. Yet, notwithstanding the attention which so important a subject receives, and in spite of the improvements in schools, public and private, a considerable portion of the rising generation do not exhibit the progress which the efforts in their behalf should produce. There are exceptional cases, in which pupils appear signally to profit, and there are, on the other hand, exceptionally bad and uncultivated youth, upon whose minds and morals education appears to make no good impression whatever. There is hope, however, even for these, as they grow older. And there may be disappointment in regard to the after lives of good pupils. Unfortunately, there are too many who seem to make only the worst use of what they have been taught, and to become more mischievous than otherwise through their very advantages.

There must be a reason for this partial failure of education, since there are causes for all things. Education *inside of the school-house*, however excellent the mode in which it is imparted, occupies but a brief portion of the pupil's time. For many hours of every day, and for two whole days out of seven, the pupil is away from the school-room, and under other influences, which go a long way towards shaping his character for good or for evil, and to "educate" him for success in life, or for failure; for an honorable career, or for one of idleness and perhaps infamy. Children are "receptiveness" personified—always ready to take and to absorb whatever may be nearest

them. They are especially obedient to the influences which *habitually* encircle them. They readily take the tone and color of their surroundings, and their characters are more dependent upon their associations out of school than upon anything which they acquire in what is technically called education, whether secular or religious.

Children are everywhere. It is seldom that one can speak that young ears are not open to hear, for children are *listeners*. It is seldom that one can move that young eyes are not watching him, for children are *observers*. As listeners they are most earnest, as observers most diligent. The world and life are new to them, and they take a great interest in things of which their elders are weary, and to which men pay little heed. To speak upon the parental charge is to enlarge upon a theme the importance of which, though too much neglected, is still never denied. Another aspect of the subject is quite as important as the family relations, though less often presented. An old writer says: "Children should be treated with the utmost reverence." Not simply by parents, for love rules or ought to rule in the family relation, and reverence to parents in the household has a stronger claim than reverence for children. Even in the household, however, the spirit of the maxim holds good.

But, out of doors, in the street, in the places where children hang like a fringe upon their elders—and children, as above said, are everywhere—that considerate conduct to children and before children, which is the basis of the maxim, should be observed. This is not because they possess any claim to the qualities that usually demand reverence, such as superior wisdom, or power, or position; but because of their innocence. For this they are to be treated with deference. If any human creature has this claim to honor, it is the little child. And if the children have it not, it is because men and women have despoiled them of their best possession of humanity. Profane and ribald talk before a little child is sacrilege against the innocence of childhood. And bad deeds, practices, or habits, indulged in before children and youth, are acted blasphemy against the innocence and purity which the child should have, and would have, if he were "simple concerning the evil."

The profanity and obscenity which few children wholly

escape hearing, and the intoxication and violence which must catch their attention, are the causes of more evil in youth than any ordinary deficiency of education can be. Some children, happily for them, are disgusted into propriety by witnessing the evil of bad examples. Such are the dull scholars above referred to who turn out better than could have been hoped. And some, of bright parts and aptness to learn, turn their schooling to bad account, under the influence of evil example. While dishonesty is tolerated among men, if only the rogue is successful and evades punishment, who can wonder that accomplished and adroit young lads turn forgers and defaulters? And while the tone of much that is printed and spoken leads to a low estimate of vice, and the details of iniquity scattered broadcast are the themes of wit; and while the novel and the drama in too many instances turn for their interest upon crime, and for their amusement upon sensuality, what marvel is it that the shrine of youthful purity is defiled, and that the education of example defeats the lessons of the school-rooms? Age may or may not deserve respect; but for the hope of the future, "children cannot be treated with too much reverence;" meaning by this that all persons should be unusually considerate of their conduct and of their words before children, for children are innocent before they are corrupted, and are *educated* to good or bad, more by the living examples set before them, than by the book-lessons taught them at school.—*Philadelphia Ledger.*

PHYSICAL CULTURE FOR TEACHERS AND THEIR PUPILS.

THE whole physical organism, bones, muscles, viscera, blood, nerves, and brain—the entire body—is but one complex instrument or organ of the mind, including thought, affection, love, moral sentiment, hope, and spirituality. It is impossible to develop and unfold the mind to its fullest capacity without simultaneous, vigorous development of the physical organism in all its parts and functions. In short, a sound mind is not possible without a sound body. Spirituality, pure love, holy affections, cheerful spirits, and vigorous

thought, do not more depend upon the quality of mind than upon the action of a good supply of pure blood on the brain. This can be supplied only by a strong and healthy action of the stomach, together with a similar action of every other physical organ. The mind reacting, too, on the body, the body itself is thus affected by its own condition.

Not only is the healthy condition and vigor of the mind dependent upon the healthy condition of the body, but the sound condition of *each* organ and function of the body is conditioned upon the healthy condition of all the *other* parts of the organism. This is also true of the mind. Each organ of both body and mind is provided for, and acts with reference to the integrity of all the rest. Our entire being acts as one indivisible *whole*. Touch one part, however small and apparently insignificant, and you touch the whole. Improve or injure, however slightly, whatever function, and all thereby will be benefited or suffer. Hence, if we are weak or diseased in *one* part, we are more or less weak or diseased in *all*. Since there is such a perfect and sensitive correlation of functions, it is a matter of self-evident importance that we be physically well developed, as the indispensable condition of possessing a happy, clear, and vigorous mind. Almost all the phenomena of disease are connected with this correlation of functions. Disarrangement takes place in one organ or structure of the body, and speedily all those that are correlated with it participate in the disorder.

What then are the conditions of physical health and strength? The first condition is to be *born* with a sound constitution. Unfortunately, for most of the present generation, few are thus born, owing to gross neglect of physical culture by previous generations. This we cannot avoid. But, starting with whatever constitution we may have, we can so live as to make the best of what we have inherited. And how? We might say by living in conformity to all the hygienic laws, to which, of course, it is not our purpose in this article to allude; but, so far as our present intention is concerned, we shall answer by saying, first, take systematic exercise; second, *take systematic exercise*; third, TAKE SYSTEMATIC EXERCISE. Animal life is as much conditioned upon exercise as upon food. It is only by physical action that we grow physically strong, and become healthy and vigorous. It is impossible to lift the

arm or contract a muscle without producing electrical changes, disintegrating old flesh and depositing new. That *action*, within certain limits, gives strength to both body and mind, is one of the most simple and evident laws of nature. Find out the weak part, or feeble function, and strengthen it by suitable systematic exercise. If the brain, or the passions, or the muscles, are too much taxed, and so are robbing other parts of their proper share of the vital fluid—the blood—then change off the one action for another, and so strengthen the inactive organ by *action*, and the overtaxed part by *rest*.

What classes most need physical culture or systematic exercise? Not the farmer, the mechanic, the miner, or any other general laborer. These, as a rule, have too much physical development. They should have more rest from toil, and take more mental exercise. The classes requiring more physical culture are those who best know their need of it: the lawyer, the clergyman, the teacher, the student, the clerk, the banker, the book-keeper, and all persons whose chief occupation consists in employing only the brains or fingers.

For all these classes, whose hours of employment and rest consume most of their time, some systematic physical exercise, not consisting of labor, is indispensable. And what shall it be? This question involves taste, cost, time, and convenience. Various methods have been practised by different persons, according to inclination, as rowing, ball-playing, horseback-riding, walking, running, jumping, boxing, fencing, wrestling, military drill, calisthenics, a systematic course of gymnastics, etc. While all of these *are good at times*, and for *some*, yet no one of them is without objection, as they all are attended with more or less impracticability, owing to either cost, inconvenience, time required, inclemency of the day or season, or distaste of the person; and, therefore, no uniform and systematic exercise can be obtained by any of these methods. Hence the exercise had by these means is spasmodic, and many times, too violent, often producing more injury than good, by straining only parts of the organism, instead of affording a general simultaneous action of the whole system at the same time. The method employed should be, as far as practicable, suited to the taste, means, and convenience of all—men, women, and children—and of such a character as to ensure certain de-

sired results, namely: The *greatest possible amount of exercise in the least possible time*, and, consequently, with *the least possible fatigue and nervous exhaustion*. To accomplish these objects it is necessary that the means be not distasteful, or very expensive, or require much time. It is also important that the exercise be graduated and cumulative, and taken with regularity as far as possible, and that the action or exertion be thoroughly and uniformly distributed over and through the whole body. For, by the law of correlation of functions, that exercise is the best which calls into harmonious, simultaneous, and co-operative action the greatest number of organs and systems of organs at the same time. For instance, it would not be sufficient for a person to move only a hand or an arm, though it be moved rapidly and for a long time. So, too, it is not sufficient that the muscular system of half the body be exercised, or even of the whole body, only as such exercise quickens and invigorates the action of all the rest of the organism, including viscera, arteries, veins, capillaries, absorbents, blood and other fluids, nerves, brain, and even the will. Hence, that is the best method of habitual exercise which most completely accomplishes this general result.

Of all the devices for habitual exercise yet produced none is less objectionable or presents greater advantages than the *Lifting Exercise*, generally termed the "Health Lift" or "Lifting Cure."

A suitable apparatus for this exercise constitutes a *complete parlor gymnasium*, affording a scientific system of cumulative exercise and physical training, by developing at once the whole muscular, visceral, and vital systems, equalizing and invigorating the circulation of the blood, and thus giving harmonious, simultaneous, and co-operative play and action to the *greatest possible number of organs*, embracing muscles, superficial and deep-seated viscera, absorbents, veins, arteries, capillaries, nerves, brain, and will, upon which depend the restoration and preservation of health, and a uniform, vigorous action of all the functions of both body and mind.

The "Health Lift" or "Lifting Exercise," as the means of physical culture, and preserving and restoring health, has been extensively and thoroughly tested, proved, and commended, by thousands of eminent scientific, professional, and literary men,

and leading journals throughout the land, such as Oliver Wendell Holmes, Henry Ward Beecher, Robt. Collyer, De Witt Talmadge, O. B. Frothingham, W. I. Buddington, H. M. Scudder, Prof. Edward Hitchcock, Horace Greeley, *Scientific American*, *The N. Y. World*, *The Home Journal*, *The Atlantic Monthly*, *The Christian Advocate and Journal*—in short, by professors of colleges, clergymen, physicians, lawyers, journalists, and professional gymnasts universally—until there is no doubt of the efficacy and usefulness of the "Health Lift" or "Lifting Exercise," as a means of physical culture and health. By such competent testimony it has been demonstrated that it affords *the greatest amount of general and invigorating exercise, in the least possible time, with the least possible trouble, fatigue, and nervous exhaustion*, curing the sick, strengthening the weak, and invigorating the healthy.

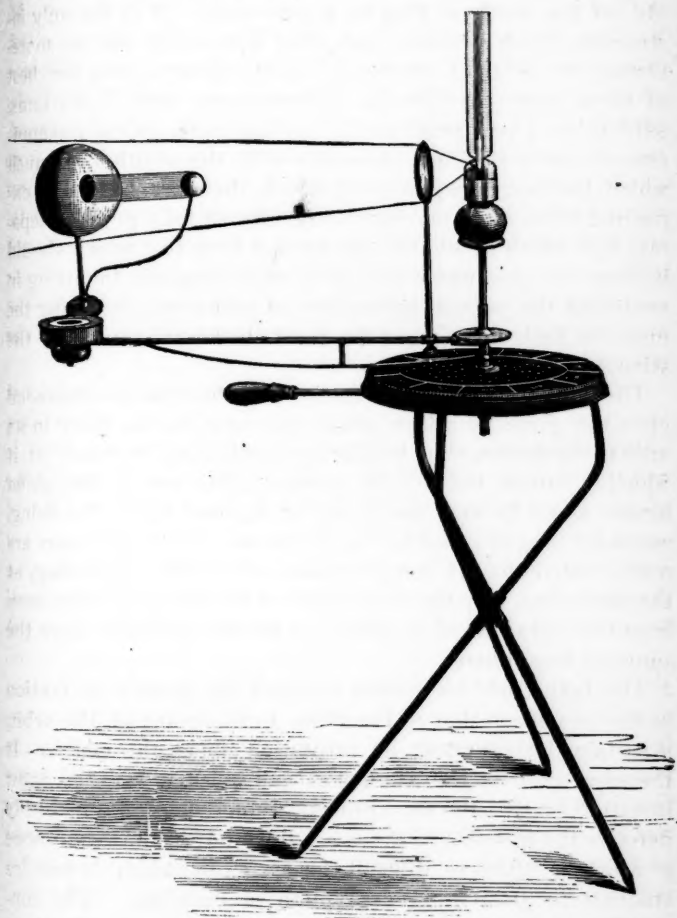
The reason why the "Lifting Exercise" is not found in every family and school is because the machines or apparatuses, heretofore produced, are so bulky, heavy, and expensive, as not to be convenient or generally afforded—those claimed to be good costing from \$100 to \$300, and weighing from 300 to 1,500 pounds.

The importance of this system of physical training has led a gentleman, whose name is not unknown to the educational world, to invent a light, cheap, compact, portable parlor apparatus, which has finally brought this invaluable method of restoring and preserving health and invigorating the general constitution within the reach and means of every student, every teacher, and every school. The apparatus weighs only fourteen pounds, and will cost about twenty-five dollars; at the same time it possesses all the advantages of the high-priced and heavy machines. It is easy to predict that, ere long, no teacher, and no school however small, will be without the "Health Lift."



As an indication of the advancement that science has made recently, it might be stated that a gentleman at one of the city markets the other day, saw half a bushel of white turnips run through a cider-mill, and half an hour thereafter noticed the same article, bottled and on sale, and labeled "Pure Grated Horse-radish."—*Boston Globe*.

SYSTEM OF THE EARTH.



THE great scarcity of suitable apparatus for illustrating Astronomy, causes us to take peculiar pleasure in presenting to our readers Prof. Boyle's illustrated description of a new and simple apparatus, to aid teachers in this most important study. We trust that some enterprising manufacturer will bring this instrument within the reach of every school.

The instrument herewith illustrated is the only mechanical apparatus which presents the motions, angles, eccentricities, etc., of the earth as they in reality occur. It is the only instrument which performs just what does occur, and no more. Owing to deficient mechanical comprehensiveness, the best of those known as Orreries, Planetariums, and Globariums, exhibit but a very small portion of the astronomical phenomena of our world, and invariably with the addition of much which does not take place, and which, therefore, has to be explained away, often making it very difficult for a pupil to separate that which should be remembered from that which should be forgotten, and which has done much towards involving in confusion the popular conception of astronomy, inducing the many to look upon it as the most incomprehensible of the sciences.

The light at the center—representing the sun—is condensed upon the globe by a lens, which accompanies the body in its orbital revolution, thus brilliantly illuminating that half of it which is turned towards the central light; and as the globe rotates about its axis, the causes of day and night, the rising, westward progress, and setting of the sun, moon, and stars are made evident to the comprehension of a child, explaining, at the same time, why the feeble light of the stars, so easily seen from the night side of the planet, is undistinguishable from the sunward hemisphere.

This is the only instrument in which the proper inclination of the axis of rotation of the globe to the plane of the orbit, is sustained throughout its revolution about the center. It therefore exhibits the equinoxes and solstices as they occur in nature, so that the most ordinary comprehension can readily perceive the meaning of those arbitrary terms, the significance of which is often so difficult for even comparatively mature students to grasp from description or drawings. The constantly-sustained inclination of the axis of rotation to the plane of the orbit during the revolution of the globe about the center, coupled with the illumination, necessarily exhibits the alternations of the seasons, the long polar day and night, and the causes involving the differing lengths of day and night in the different latitudes.

As the moon revolves about the earth, while that globe re-

volves about the luminary, it is occasionally seen to enter its shadow and undergo an eclipse, and, in turn, to project its own shadow upon the earth, as seen in the illustration. This shadow will move across the globe in different paths at each successive return, clearly illustrating what astronomers mean when they talk or write about "The path of a solar eclipse." Neither will those eclipses of the sun or moon be exhibited by the instrument, unless when the globe is in or near its equinoxes; so that in this respect, also, it is true to nature. It will, however, be necessary to take into consideration the fact that, at the distance at which the globe is situated from the center, the diameter of the moon's orbit, when drawn upon a corresponding scale, would come inside of the tenth of an inch; that of the globe of the earth inside of the one six-hundredth part an inch, while the moon could not be found with a microscope. Comparative magnitudes, therefore, cannot be represented.

The precise nature of the precession of the equinoxes has never before been mechanically represented; and to give unmistakable expression to the real nature of this phenomenon was the chief motive that led to the production of the instrument, because many fanciful theories have been erected upon its misconception by men who have the reputation of profound thinkers; some assuming it to be a geographical mutation, which, alternately, shifts the poles to the equator, and the equator to the poles, and therefrom attempt to account for the presence of fossil tropical fauna and flora in the high latitudes. But as this mimic system of the earth performs a complete revolution of the equinoxes while completing forty-two sidereal revolutions about the center, which is identical with the real phenomena in all but length of period, it shows that no shifting of the geographical poles is effected by the phenomenon; from which it follows that the causes of the higher latitudes once abounding in tropical life are not to be found in this astronomical feature of our planet's history.

A progressive shifting of the equinoxes in a fixed direction upon the periphery of the orbit, involves also a corresponding shifting of the solstices, which, of necessity, must have their position in the opposite quadrants. As this movement is constant and always in the same direction, there is, necessarily, a

period of time in which the equinoxes and solstices will complete an entire revolution about the center, and in relation to the fixed stars; consequently, the north pole of the earth, which is now directed nearly towards the north star, will gradually depart from that direction to an angular distance of 47° , then as gradually return, and, at the close of the cycle, point again towards the north star; and its equinoxes and solstices will be located among the fixed stars, as they now are. All this may be perfectly illustrated by the "System of the Earth," if, before beginning to revolve the globe about the orbit, we observe upon the ceiling of the room the point towards which the axis of rotation is directed, and regard it as the north star; then mark, at each successive revolution, the gradual change of direction which the axis undergoes. We shall find, when the instrument completes the cycle of the equinoxes, and returns to the position from which it started (the north star), the axis of the globe, produced or continued from the north pole, will have described upon the ceiling a circle which, from the position of the instrument, subtends an angle of 47° ; therefore, this mimic system is a perfect imitation of the real. This revolution of the equinoxes has been termed "The earth's great year," which is a perfectly correct expression for it, since it is as truly an annular revolution of the earth's relation to the fixed stars, as its yearly revolution is; but the term "*year*" has led some geologists into the error of assuming that, being "*a year*," it must have seasons corresponding to the magnitude of its cycle of 25,600 sidereal years to one, and that the heat of its summer, and the cold of its winter, will have a corresponding intensity. Upon the strength of which it is asserted that our earth is once destroyed by the inconceivable heat of its summer, and once destroyed by the equally inconceivable cold of its winter, and that, therefore, the drama and tragedy of creation are reenacted every twenty-five thousand six hundred years—to sustain which we are called upon to believe that the molten condition of our planet preceding the deposition of the sedimentary rocks, and the glacial epoch which followed their formation, are testimony which sustain this hypothesis. But if we observe the conditions of illumination upon the globe throughout the cycle of the precession of the equinoxes, we shall find no change in the seasons, or the day or night of the

sidereal year ; therefore, the phenomenon of the precession of the equinoxes has no element which, in any way, affects the temperature of our earth. Those are errors which the "System of the Earth" will extinguish, and compel a reconsideration of those assertions.

The instrument is made to strike a bell automatically at the moment of passing its vernal equinox. This enables us to mark, with precision, the departure of the equinoxes from any fixed starting-point amongst the stars of the signs of the zodiac, which are painted upon the disk forming the table top. The position amongst the stars, where the earth is now passing its vernal and autumnal equinoxes, is designated by a red line, in order, when desirable, to make that the starting-point from which to observe the progressive change which takes place in the shifting of the equinoxes about the ecliptic, which is also represented by the plane of the table-top.

In planning the instrument, it was deemed judicious to make it complete a revolution of the equinoxes in forty-two revolutions of the globe about the center, so as to complete the cycle before tiring the pupil. As the real cycle of the equinoxes extends over twenty-five thousand revolutions of our earth in its orbit, it was practically impossible to make the instrument to correspond, as it would have required several weeks of rapid motion of the globe about the center with an almost imperceptible shifting of the equinoxes ; hence the plan adopted of completing this cycle with so few sidereal revolutions of the globe. In all other respects the phenomena of the precession of the equinoxes are identical in the mimic and the real system of the earth.

C. B. BOYLE.



GIRARD COLLEGE is one of the richest educational corporations in the country. The income in 1874 was sufficient to meet all expenses and leave a surplus of about \$200,000. When the land connected with the institution is all occupied by dwellings and rented, the income will be enormous. There are now 550 orphans in attendance and 150 eligible applicants for whom there is no room. It is proposed to enlarge the accommodations.

CAPACITY.

WE remember hearing, when we were young—and that was a long time ago—a story of a shoddy aristocrat who sent his daughter to boarding-school to have her educated and polished up to the position in which, by his suddenly-acquired wealth, he was enabled to place her. Going, some time after, to visit her, he made inquiries of her teachers in regard to her progress, and was informed that she was doing as well as she possibly could. "But," said the teacher, "she lacks capacity;" whereupon the indulgent and very anxious parent asked, in the honest simplicity of his heart: "Then why did you not get her one? Did I not tell you not to let her want for anything. I am rich, and if my daughter wants a capacity she can afford to have it, and as good a one as there is in the market." At the time we heard this story, we thought it exceedingly funny; but, in the years that have passed since then, we have learned from daily observation that the one great need in all the walks of life is this same "capacity," and the lack of it is the rock on which many lofty ambitions have been shattered. Give a man or woman a capacity for doing any one thing, be it lofty or humble, and you straightway elevate them to the position of a master; make them fully competent to do their work, whatever that work may be, and you place them in a position of independence.

The best places are always open to those who are able to fill them, and who, having entered upon a work, are not content with the daily routine, or the steady well-doing of the mere obvious duties, but whose every leisure moment is given to the development and perfection of that work.

In our observation of this subject, there is another fact which has impressed us, and tended to strengthen our belief; and that is, that the lack of capacity is often made up by the surplus of assurance. This was strikingly illustrated recently when a firm doing business in Broadway advertised for a "saleswoman, accountant, and correspondent." As usual, there were numerous applicants for the position, and each one was required to write her name and address, both as a test of her

capacity, and for future reference in case her services were required. One was a *sails* woman of several years' experience; another occupied at least five minutes in the production of her autograph, embellished with hearts, and darts, and Cupid's quivers; while a third assured us that, although the work was entirely new to her, she was able to make herself thoroughly conversant with any business in two hours' time. And we are sorry to say that the latter instance is not by any means an exceptional one, and it is often the case that this is about the length of time of the preparatory course through which young women pass to emerge into full-fledged experts. It cannot be denied that the course of training through which girls pass, is sadly inefficient and superficial, and this is the one great reason why they do not command the salary which is given to men occupying similar positions. It is a fact patent to any one who has occasion to visit our large stores where most of the clerks are women, that they are less attentive and more disobliging than men. There must be some reason for this state of things, and we find the most reasonable solution in the fact that girls receive no sufficient training and discipline for the places which they hold.

Genuine merit will not long remain unappreciated, and the woman who puts her soul into her work, and tries with all her might to become a skilled artisan, will sooner or later find her efforts crowned with success, and reap a reward commensurate with the pains she has taken and the sacrifices she has made.



RAISING THE STANDARD.

DURING the summer vacation, principals of private schools and academies make arrangements for the conduct of their institutions during the school year; and, if we may judge by experience, some will this year raise their standards of instruction. We say that they will "raise the standard," because they use that term to define their action. It would sometimes be nearer the truth to say that they stretch, rather than raise, the standard. No more is demanded from pupils, on admission, than in previous years, and the time of attendance is not increased. They are simply required to do more in

the same time than they have done before. In many cases this is impossible, and the principal knows it to be so. He is perfectly aware that, if new studies are introduced into his curriculum, they can be pursued only by neglecting the old ones. He "raises his standard," nevertheless, and does it to meet what he considers a popular demand.

Such a course unquestionably attracts some people. Many men are so busy, or so careless, that they pay little attention to the education of their children. When the time comes for them to be sent away to school, they look over the circulars of several institutions, and, other things being equal, patronize the one which promises the most for the least money. But when their children write that they are studying political economy, and throw in a few remarks about "labor" and "capital," parents begin to doubt the wisdom of their selection. With the new year they make a change, being careful to choose a school where spelling is made a specialty. Could statistics be obtained, we do not doubt but that they would show the patrons of such institutions to be constantly changing. Parents do not send one child after another to them.

Unfortunately, there is a class of teachers willing to descend to the dishonesty of pretending to raise their standards of instruction beyond what they know to be proper. They take up teaching as a temporary occupation, to be followed only until they can get something better to do. They are therefore anxious to make as much money as possible in a short time. But a teacher who intends to make teaching a life-work cannot afford to pursue any but an honest course. Reputation is of more value—we mean worth more in money—in the long run, than a few years of seeming success. The old schools which are flourishing now, laid the foundation of their prosperity by thorough work. Their first progress was perhaps slow; it was undoubtedly sure.

If it were proper, we could point out some schools which, by thorough work, are annually increasing in influence and prosperity, and we might also name many, very flourishing now, which will, in a short time, either pass into new hands or fall to a second or third rank.

For a school, a good reputation is invaluable, and this can be obtained only by thorough work. It would be well therefore

for principals to determine how much work pupils can do well, and give them only that amount to do. If the number of studies is already up to that standard, let it not be increased; if it is above it, let it be cut down.

CORRESPONDENCE.

CLINTON, N. C., July 7, 1875.

MR. EDITOR :

DEAR SIR,—The article on page 258 of your *Monthly* for July, falls into an error which I am confident you will rectify, in regard to the common schools of North Carolina. You state that there was no public school system "in a single Southern State" prior to the war, and then proceed to give the credit of free schools in the South to the vile interlopers who were put in charge of our affairs after the war.

Common schools were established in North Carolina thirty-five years ago, supported by the interest of the Literary Fund, and taxes levied by the county courts, equal to half that interest. The Literary Fund was the State's stock in various banks, railroads, and navigation companies; license taxes, swamp lands, moneys paid for entries of vacant lands, and all bonds due the State from railroad companies.

After the war, half the State Shermanized, and the whole as poor as Job's turkey (what Job was this? the turkey was not known to Asiatics), we were unable to support free schools; but Thaddeus Stevens & Co. destroyed our constitution, and imposed on us all the burdens of an expensive State government, under which we are now groaning. Many efforts have been made or proposed, to get rid of the foreign and inimical constitution—none certainly to destroy the common schools—but threats from the "third term" gentleman or his satellites have so far prevented us.

That useless and unconstitutional beneficiary of the Federal Treasury, who writes himself Commissioner of Education, has seemed to delight in devoting the pages of his worthless Annual Report to vilifying and belying the South; but I know you will not do us an intentional injustice. Hence I send you this correction. Very respectfully, B. F. GRADY, JR.

CURRENT PUBLICATIONS.

PROFESSOR S. W. WHITNEY has prepared a new *Primary English Grammar*. In a very easy and practical way it solves several difficulties which all teachers have met in attempting to explain the mysteries of Etymology and Syntax to "darkness that comprehended them not." How many times, when environed with doubts in regard to propriety of speech, we have consulted the learned doctors, and found that, on the very point on which we would have been willing to read a small volume, they had not a word to say; while, on the things about which we did not care to be instructed, they were very verbose. This lively jumping of the grammarians reminds us of a game we used to play at school. The boys would join hands in a circle around a pile of hats. The effort would be to pull some unlucky fellow over the hats in a way to make him knock down the pile, and then subject him to the "beetle and wedge" penalty, for his mishap. So some of the grammarians seem to play around the pile of difficulties in our language. Some are expert in jumping high over the pile and avoiding dangerous entanglements, while others have excelled in pulling rivals down. Professor Whitney goes into the game without fear of the consequences, and with a very creditable reliance on his ability to conquer. He does not hesitate to go just where the hard places are. When we say that his classification and treatment of the subjects of Etymology and Syntax are somewhat novel, and that his definitions are mostly new, we do not mean that they are merely new and nothing more. They have been practically demonstrated by the author himself during years of successful labor in one of our best schools. One new departure is this: He has an additional class of words which he calls "Responsives." Under this head we find such words as "Yes," "No," "Amen," etc. When we call these words adverbs, and say that they modify the entire question or sentence which precedes them, we are wholesaling our grammatical wares in a way to make a small boy stare at the big figures. Have we not told him the truth, the whole truth, and nothing but the truth, when we say that those words are responsives? And so in his

disposition of the word "*that*," in such a sentence as "It is true *that* he is here," and with the word "*yours*," in "that hat of yours," the professor gives a construction that can be clearly comprehended and satisfactorily taught. So, too, he gives rules of construction in regard to partitives and quantitives, and a new view of collectives, and of the classifications of pronouns, and of the comparison of adjectives, which are all comprehensive, sensible, and eminently practical. In the selection of a verb as a paradigm, he shows that he is an old hunter, and not out after tomtits. Instead of taking a word like "love," in the conjugation of which the teacher is obliged frequently to ask his pupil "Did you say I love, or I loved?" he selects the verb "to trust." With this word as a paradigm there need be no difficulty in distinctly pronouncing the past tenses. So there are points deserving notice in the treatment of the subjunctive mode, to which we may refer hereafter.

Syntax is treated under three heads: first, The relations of the different parts of speech to one another; second, Certain uses and applications of words in discourse; third, The rules of concord and government. Illustrations and examples are copious; there are questions on every page, and questions for review at the end of each part. All those atrocities of language which a practical teacher is obliged to hear so often from his pupils, and which he must ground arms to condemn and excoriate, such as "I done six," "I seen that," "Has the bell rang," etc., etc., are quoted, corrected, and explained. The exercises of this kind are made up of what the author has "found and made note of" in a long and useful career as a teacher. There are enough of new and original ideas in the work to commend it to the careful and critical examination of teachers, and persons who have the selection of text-books for the uses of schools.

MESSRS. SHELDEN & CO. have published a new series of *Colton's Geographies*. The one before us is a new Introductory Geography, illustrated with numerous engravings and eighteen maps, drawn expressly for the work. The first part imparts to the pupil, in a few easy lessons, the simple elementary ideas necessary to a clear comprehension of the more formal and concise statements of the text. The second part is devoted to recitation lessons, and all necessary aid is given

the pupil, in order to interest and instruct, while they do not weary or disgust him. The work seems well adapted to the wants of beginners, for whose use it is especially designed.

The same publishers have issued an *Outline History of the United States*, by Benson J. Lossing, LL.D. It is designed for public and other schools, and covers a period from the discovery of America to the present time. It is divided into six distinct periods in the natural time and order which events suggest, namely: Discoveries, Settlements, Colonies, the Revolution, the Nation, and the Civil War and its consequences. The work is arranged in short sentences, making it easy of comprehension; most important events are indicated by heavy faced letter, thus impressing the vision and aiding the memory; and full and complete questions are framed for each chapter, thus inducing a review of the facts. It is profusely illustrated with maps, charts, and plans, explanatory of the text, and by carefully-drawn pictures of objects and events. Fac-similes of the colonial seals are given, as also a copy of the national constitution. Altogether it is a very complete and excellent work.

The same house publishes *Olney's Mathematical Series*, of which we have a *Primary Arithmetic*, arranged with special reference to the needs of beginners. It is so simple that a child who has not yet learned to read can be taught to count, and gradually to read, at the same time that he is learning the elementary combination of numbers. The pupil is taught how to *make* the Addition, Subtraction, Multiplication, and Division tables for himself, and is thus relieved from the monotony which is inseparable from the process of committing these to memory without the incitement of feeling that they are really the work of his own hand and brain.

The *Primary Arithmetic* mastered, he is prepared to take up the second work of the series, *The Elements of Arithmetic*, for intermediate, grammar and common-schools. This is an elaboration of the principles learned from the *Primary*, and a continuation of the natural development of the mind, and contains all the arithmetical topics which can properly and profitably be included in a common school course. The same author has in press a *Teachers' Hand-Book of Arithmetical*

Exercises, and a work entitled *The Science of Arithmetic*, to be followed by an Algebraical and Geometrical series.

PROFESSOR JOHN PHIN, editor of the *Technologist*, has given us a useful little book, entitled: *Practical Hints on the Selection and Use of the Microscope*. It is intended for beginners, and gives, in the plainest language, very complete directions for the management of the microscope, and for collecting objects, preparing them for examination, and preserving and mounting them. There is a vast deal of pleasant recreation and of valuable information to be gained from the use of a simple microscope, and such instruments are in the possession of many people who fail to obtain either, from lack of knowledge in the use of them. To such persons this little work will prove invaluable. Avoiding technical and scientific terms, it is evidently the work of a practical man, who has made the microscope a study, and it cannot fail to enable those in possession of common microscopes to obtain from them the greatest amount of instruction and pleasure.

MESSRS. WILSON, HINKLE & CO. have recently published a *Manual of English Rhetoric*, by A. D. Hepburn, Professor in Davidson College, S. C. It is designed to meet the wants of classes in High Schools and Colleges. The author gracefully acknowledges the sources from whence he has drawn help in the preparation of the work, and we believe it contains the largest amount of information possible to be condensed into the space allotted.

A DOUBLE STORY, by George Macdonald; Dodd & Mead, publishers. We are somewhat at a loss what to say about this book. It is a small volume, neatly bound and prettily gotten up, but whether it is intended for food for babes or nutriment for minds of older growth, we can hardly determine. Its object is to teach the necessity of self-control, and the fatal results of allowing a child to give full vent to all the impulses of its nature, and to grow up unrestrained and headstrong, totally unconscious of any duty or obligation which it owes to any one. The moral is a good one, but the style in which the story is told is rather beyond the comprehension of the minds of children, for whom it is evidently intended.

INTRODUCTORY GERMAN READER, by Dr. Emil Otto, with Notes and Vocabulary by Edward S. Joynes, M. A., Professor

of Modern Languages in Washington and Lee University; Henry Holt & Co. publishers. The object of this work is to furnish a reading book in German, which may be begun at the earliest stage of study, and continued along with the progressive study of the grammar, until the student is prepared for more difficult reading. The early reading of a language furnishes the best means of mastering its grammar and idiom; and in this work great care has been taken to furnish such material as the student may require for this purpose, and at the same time to stimulate the interest in study. By easy progressive steps the pupil is led almost insensibly through the intricacies of the language, always finding at hand the necessary help to enable him to master its difficulties.

CHRISTIAN MISSIONS, by Rev. Julius H. Seelye, Professor in Amherst College; Dodd & Mead, publishers. This is a collection of six lectures by Rev. Dr. Seelye, under the following heads: The condition and wants of the unchristian world; Failure of the ordinary appliances of civilization to improve the world; The adequacy of the Gospel; The millennarian theory of missions; The true method of missionary operations; Motives for a higher consecration to the missionary work; and a sermon by the same author on "The resurrection of Christ the justification of missions." The book contains an amount of statistical information on the progress of missionary work throughout the world, and able and exhaustive arguments on the benefits derived, and the best means of promoting and spreading the good work.

THE GAME OF THE ENGLISH KINGS is the name given to a pretty little game, designed for amusement and instruction, by Miss S. E. Jones. It is a collection of sixty cards, divided into families; and the object is to win the greatest number of tricks, each trick consisting of five cards containing the names of a family—the father and mother, three children or relatives, and a battle or noted event in the reign. It is a medium through which one can gather much historical information, and at the same time pass away many pleasant hours.



TAXES for education are like vapors which rise only to descend again to beautify and fertilize the earth.—*Burke.*

PRESIDENT WHITE ON COLLEGE BOATING.

IN congratulating the victorious Cornell crew, on their return to Ithaca, President Andrew D. White said :

"I believe in college boating. I will tell you briefly why I believe in it. First, on account of the physical training it gives. If there is anything which has cost American scholarship dear, it is the want of physical training, going on at the same time with intellectual training. If the reasons are sought why the scholars from American universities have not made themselves felt as they have expected to make themselves felt in public matters, I think that one of them is the fact that physical strength—that bold, determined, elastic strength which gives men of intellect such power among their fellow-men—has been neglected. And often men of rude, uncultured strength have been seen to step in before them and take the reward which it was supposed the college-bred men would take. I hail this enthusiasm for boating as the beginning of a better day in this respect. There are more troubles which arise out of dyspepsia than men generally think. It was the remark of an eminent divine that half the bad theology in the world, and half the bigotry, is the result of bad digestion, and I am induced to think that many of the defects in politics can be traced to the same cause. I firmly believe that in promoting physical at the same time with mental culture we shall do a good thing for this country, and fit our men to take the leading positions in the country.

"I am aware that some objections are made to boating, and I will say a few words upon that subject. Of course, every institution in the country that has no water or strength will have conscientious scruples about boating ; and I will prophesy that within the next two weeks you will see coming from the multitude of those institutions that have not strength enough, or are not energetic enough, or have not water enough to cultivate the boating interest—tirades against the evil influences, morally and intellectually, of boating ; and you will see that a certain class of newspapers, not secular newspapers, but a certain class of newspapers whose duty it is to cuddle and

pet such institutions, will take the same views, and I commend them as interesting reading for the next month.

"It is said that boating takes time. It does take time, and woe to the student who does not take time to exercise. Look at your telegraphic despatches to-night. There is one that affords a sad commentary upon this fact. And too many of our scholars go forth unfit to battle with the world, from lack of physical training. Again, it is said that contests of this sort are exciting, but how much better than the morbid excitement in which too many of our people are forced to take refuge. It is healthy, hearty, spontaneous. The hearts of the public go out towards these men, and they are with them, and from an excellent motive. It is also said that these contests provoke evil by reason of others betting, etc. The same argument might be used against celebrating the Fourth of July, and that we ought not to have a celebration. I never crossed the Atlantic when there was not a party of men on board betting on the run of the ship, ready to bet on the color of the eyes of the pilot, and as to which foot he would put out first on boarding, but it does not prove that men should not go to sea. So, my friends, as long our young men put themselves in training and abstain from dissipation, as these men have done, the abuses by comparatively a small number is no argument against them.

"I am glad to bear testimony in regard to the scholarship of the boating men. To-day the registrar has furnished to me the official statement of the standing of the members of the University crew which has won the race, and I am glad to say that it represents admirable scholarship in the various departments, and I feel warranted in making the statement that, were you to choose out by lot an equal number of students from the University, the chances are two to one that you would not take in as many men who have been as faithful and diligent in their intellectual pursuits at the University."



MRS. LAURA B. LYMAN, the new President of the Brooklyn Women's Physiological Society, is a writer on the *Tribune*, and the widow of the former agricultural editor of that paper.

SPIRIT OF OUR EXCHANGES.

THE *New England Journal* of Education, which is one of the best of our exchanges, devotes much of its space to the coming Centennial. It gives some practical suggestions regarding the preparation of material for the exhibition of American education at the international exhibition at Philadelphia in 1876, from which we condense the following: "There should be full-sized specimen buildings for infant and kindergarten schools, the national school or the ungraded country school, the graded village school, with the whole of their belongings and equipments, from different States of our country. Also, a full-sized American pioneer log school-house, with its appropriate fittings and furniture, and adobe and sod school-houses from the Southwest and Northwest; views and plans in drawings, photographs, and engravings of historical, representative, and ideal educational buildings, and of samples of the best public school edifices, rural, village, and city, with working plans; plans of grounds, maps showing designs for ornamentation, all furniture suitable and in use in school-rooms, all apparatus and appliances, with text-books and books of reference. Teachers can stimulate scholars to constant and persistent effort during the coming year, by encouraging them to prepare specimens of drawing, writing, composition, or whatever branch they are most efficient in. It is suggested that exercises designed especially for the exhibition be commenced simultaneously on the 1st of February, 1876. Before that time we shall endeavor to give more complete directions for preparing objects for this purpose."

The Pennsylvania School Journal has some pleasant articles from the pen of Benjamin Hallowell, a Quaker, and an old and distinguished teacher. He says, in speaking of the difference between play and work, that "That is play, no matter how severe the exercise or labor, which is done of one's free choice, and under one's own direction? That is work, however light the employment, that is under the control, direction, and authority of another. To illustrate my idea, I will relate an incident:

"During the latter part of the time that I was mathematical teacher at Fairhill Boarding-School, in Montgomery county, Maryland, under the care of Baltimore Yearly Meeting of Friends, from 1819 to 1821, inclusive, John McPherson, from Jefferson county, Virginia, was superintendent. The students had the range of some four or five acres of land, down to the 'Branch,' as they there call a small stream, including a clump of trees and a thicket. The boys were observed for several days to be very busily engaged beyond the clump of trees, but as there was nothing that could be injured, or that would injure them, no notice was taken of it.

"One day two students came running to the superintendent, almost out of breath, and called out, 'Oh! superintendent, superintendent! the sow is in a deep hole down in the bounds. Come see!' The old man went with them, and on arriving there, he at once took in the whole situation. He saw that they had dug the hole and got the animal in it by design. The animal would weigh some three hundred pounds, and the hole was fully five feet deep, so that it would be attended with no little difficulty to get her out.

"After reflecting a short time, he said: 'Well, boys, you have dug a grave for the old beast; now bury her.' This was a grand idea for them! At it they went, in fine glee, pushing in the earth with spades, shovels, hoes, paddles, and shingles; and, when these were all employed, scraping in with their feet. But the 'old beast' would not stay buried! As the boys put the earth in the hole on her, she (as the shrewd superintendent had seen) would rise above it; and when the grave was full she quietly walked out.

"This was all play to them; whereas, had the superintendent ordered them to fill up the hole they had dug, in order to get her out, this would have been work, and have been entered upon with a very different feeling, and it would have required much longer for its accomplishment, even if this would have been done at all. Everything can be moved pleasantly and harmoniously, if you employ the right means."

The Indiana School Journal protests against the growing custom of addressing school children as "Mr." and "Miss." While they are known at home, among their associates, and, in fact, everywhere, by their baptismal names, in the school-

room they are addressed as Mr. and Miss. Another and worse practice is that of calling boys and girls by their last name alone, as "Jones," "Smith," or "Brown." This may be allowed, though it is surely not in very good taste, with boys, but girls should never, under any circumstances, practise or allow it. The editor of the Journal says, when practised among girls, it invariably reminds him of hens trying to crow, and of young men who part their hair in the middle.

The National Teacher, in its Notes from New England, which locality for the last few months has been so prolific of centennials and commemorative festivals, gives a good sound rap over the knuckles of Yankee complaisance, by the statement that, while one hundred years ago there was no need of a compulsory education law, because the pride of the people of the old Bay State in being looked upon as one of the most enlightened communities under the sun, secured the education of almost every child within its borders, there are to-day, in that same good old State, more than sixty thousand children growing up in ignorance. So much for the progress of civilization during the last hundred years.

The Illinois Schoolmaster tells a good story of a certain aged school-mistress, who, feeling that she was about to die, sent for the curé of the parish to attend her. One great sin burdened her conscience, and she could not die in peace without making confession. She began, but sobs and tears and groans and sighs checked her utterance. The curé tried to comfort her and told her that surely she would be pardoned, for she was so penitent, and added, "I hope the sin is not a great one." "But it is," she said, "and, I entreat you, do not call me good, for I am not good." Then, in an agony of contrition, she added, "Father, I accuse myself of having taught grammar, and I—I—oh! I knew nothing about it myself." We trust this story may point its own moral.

The Maryland School Journal pays a tribute to the character of William Rufus Creery, late senior editor of that journal, who died a few weeks ago. He possessed great ability as a teacher, and held many positions of responsibility, among them Professor of English Literature, and, later, Superintendent of Schools in Baltimore. He was the author of a

Catechism of United States History, a Primary Spelling Book, and several other works.

The Brooklyn Journal of Education takes a retrospective view of Old Brooklyn, and gives a summary of its educational work from 1834, the year in which its charter was granted, up to the present time, recalling the memories of those teachers who have left such bright and lasting records behind them, and of some who are still toiling on.

Educational Notes and Queries, which is a medium of intercommunication for teachers, adopts the very sensible plan of taking a vacation during the dog-days. Hence it does not issue any number for July and August, but will begin its work again with the opening of the school-year in September.

Home and School gives eight contributed articles, five of which are illustrated, a poem, a song, and the usual editorial notes.

The Wisconsin Journal of Education for July gives an amusing and instructive essay by Prof. J. D. Butler on "Spelling and Misspelling." It asserts that poor spellers are the majority, and gives, among other reasons for this, that we learn to spell only through fear of disgrace, an ignoble motive, and are not moved by the stronger and more inspiring impulses of hope. Another reason why poor spellers are so numerous is because they are not without plausible excuses and subterfuges. Texan illiterates say that a-man is a fool who does not know how to spell a word more than one way, while Manitobans contend for two l's in wool, because wool is so warm that it deserves to have every letter in it doubled. Poor spellers are less ashamed because lexicographers disagree. Worcester gives a list of more than seventeen hundred words, which he declares only a part of those whose orthography is doubtful. It seems to us that lexicographers are the men who should take this bull by the horns, and at once and forever settle the question, and thus relieve our language from the odium which attaches to it. Prof. Butler says the reason why nobody knows how to spell Shakspeare is because, of the five extant signatures of that myriad-minded marvel, three are written so badly that they are beyond any man's ability to read. He says no man's bad spelling was ever defended better than that of Gen. Jack-

son by John Randolph on the floor of Congress. It was charged, among other orthographical peccadilloes, that Old Hickory began the word Congress with a *k*. "It is true," said Randolph, "Jackson cannot spell. The reason is, that he was fighting the British while Webster was making spelling-books. Jackson cannot write, because he was not taught. Nor can Adams, either, write well. The reason is that he was not teachable. Jackson is ignorant, but he could have got over it, if he had only had a chance. Adams had a chance, but he was a natural-born fool, and he never could get over it." Randolph's reward was being sent as Minister to St. Petersburg.

The Common School, a monthly journal of education published at Davenport, Iowa, and Rock Island, Illinois, has absorbed the *Iowa School Journal*, and W. E. Crosby is the editor. He issued a double number for May and June, in order to recover lost time, and to prepare for an early publication of the July number. It is nicely printed, well arranged, and contains a large amount of valuable educational matter. It is worthy of a liberal patronage from teachers, and all others interested in the work of education in the West.

The New York School Journal, a weekly, will, during the months of July and August, be issued only once in two weeks. In a late number we find the following sensible remarks on the equality of salaries :

"Part of the system that prevails in our city respecting teachers' salaries seems to be semi-military in form. Some receive \$500, and this number is a very large one; from this sum (and now we refer to lady-teachers) it goes up by stages to \$1,700. There are in some departments twenty-two teachers, and thus we have a great inequality of pay, and no perceptible inequality of work. This is a subject upon which many of our best teachers have thought a great deal, and those who have come to the conclusion that a change could be made for the better, are, strange to say, not those who expect by this change to receive an increase of their pay. The main reason urged is that a certain amount of labor is entitled to a certain amount of pay, whether that work is done by one who is simply an assistant teacher or first assistant, whether in the

Primary, or Junior, or Grammar Department. There are other grounds that will be presented in future papers, such as the effect on the teachers' ambition, the appeal to the teachers' highest motives, etc., but the above statement shows that the claim is founded in real justice; hence it will at last prevail.

"Of course Principals and Vice-Principals should receive an extra compensation for their responsible work, but after that there should be equality of wages to all who receive a full certificate, or are certified as being skilful teachers. If it requires five years of experimental practice before this position is won by the novice, so let it be. But when it is achieved, let the pay be given that is paid for good teaching. There should be no distinction made on account of the age of pupils—they *all* require *good teachers*. In President Neilson's address, in January, 1874, we find these wholesome words:

"Justice to our teachers and a fair working of our system demands that the salaries paid throughout the city should be *uniform*, and not *varied*, for similar positions below Principal and Vice-Principal.'"

The Utah Educational Journal, published at Salt Lake City, gives a history of educational progress in Utah from 1847, the year in which Brigham Young, with one hundred and forty-three pioneers, arrived at Salt Lake Valley, up to the present time. The view is very satisfactory, and, considering the disadvantages under which they have labored, reflects great credit on the zeal and perseverance of those who have had charge of the educational interests of that territory.

The Journal of Education for the province of Nova Scotia, has an article contributed by Prof. M. M. Baldwin, on the "Age for Teaching," from which we quote the following:

"Whether the years of a teacher be few or many, they should bring with them discretion, a fair knowledge of human nature, a love for the young and for the business of instruction, ability to control himself and his pupils, an appreciation of the untold worth of the immortal soul, a good acquaintance with the branches to be taught, and of such allied ones as will be needed for illustration and explanation, as well as the theory and practice of teaching, and the general duties and responsibilities of teachers. Of course, high-toned morality should

also be added, the unfeigned fruits of which he should exhibit in his daily walk and conversation."

He adds that only in rare cases do persons of less than twenty years of age reach this standard, and our own experience would lead us to say that the attainment of these qualifications would require all the best years of an ordinary life. Pestalozzi, whose "New Education" has wrought such great changes in all the schools of Christendom, at fifty-two made his celebrated reply, "I will be a school-master," and it was then he really entered upon his life-work.

THE SUMMER EDUCATIONAL MEETINGS.

WE go to press too early to give reports of the season's Educational Conventions, except of the PHILOLOGICAL ASSOCIATION at Newport, R. I., and of the AMERICAN INSTITUTE at Providence, R. I.

Concerning the former, we learn from the report of "our correspondent" of the *N. Y. Daily Times*, that, of the two hundred and fifty members, only twenty were present. He then enumerates a long list of those who were not there, generally appending a high-sounding adjective to each name. Some of his adjectives may be fitting, but very generally they are entirely out of place, and those to whom they are applied are likely to take offence at them.

The meeting was not very enthusiastic and not very creditable to the Association. This may be due, in part, to the bad selection of the place of meeting. New York City is selected for the next meeting.

The Forty-sixth Annual Meeting of the AMERICAN INSTITUTE OF INSTRUCTION was largely attended by the most active educators of New England; and, in the character of the addresses and papers, and general interest taken in the proceedings, it recalled the scenes at the meetings of this association in former days. The Institute appears to have taken a fresh start in the cause of education, that must again call to its annual meetings the able and earnest workers in the educational field, as it did in former years.

Among the addresses and papers were the following:—
"Teaching one of the Learned Professions," by President Robinson, of Brown University.

He said: "The office of the teacher is two-fold—to impart knowledge, and to secure mental discipline. These two objects are inseparable. The one is unattainable without the other. There can be no mental discipline without the acquisition of actual knowledge.

"Object Teaching is based upon this simple truth, that the mind comprehending is first attentive, and attention is the first condition of the discipline and growth of the intellect. You cannot discipline the mind, except the mind comprehends what is offered. We must know, and in the act of knowing is the process of discipline. We grow by the exercise of the powers of the mind, and the exercise of these powers is always inseparable from the acquisition of knowledge.

"The word *profession* is used broadly to designate a man's occupation or employment. But some of the employments are distinguished as trades. The learned professions are so called because the languages employed in the study of them are not the vernacular language of the student, and on account of the kinds of knowledge required in the prosecution of these professions.

"Teaching is a learned profession because teachers should be learned men—learned in a broad sense—that they may be fitted to use the instruments of their profession in the right manner. The more a teacher knows, the more competent he is to teach; the better fitted he is even to teach the elements of knowledge.

"There is also a reason for regarding teaching as a learned profession, found in the relation of the teacher to those who enter upon the practice of the learned professions. This relation belongs to all classes of teachers. Teaching is a great profession, including all ranks that follow it, up through the successive grades. The elementary teacher occupies a position equally responsible with that of the college professor. Greater importance should be attached to elementary education. Let us have a sloven in the professional school rather than in the elementary school.

"The office of teaching is fundamental to the other profes-

sions. It is the most learned of all the professions. If teachers are blunderers, then all the professional men will be blunderers. The foundation of all education lies in the hands of teachers. If you are to have educated men in any of the professions, you must first see to it that the teachers are competent—teachers of the primary, secondary, grammar, and high-schools, of the college and the professional schools, up through the whole series."

A paper read by J. A. Shaw, Principal of the Highland Military Academy of Worcester, Mass., on "*English Pronunciation*," which placed great importance upon attention to this matter as the foundation of our language. This subject elicited considerable discussion. Mr. J. D. Philbrick, of Boston, while commending the paper, took exceptions to the great stress which some of the speakers urged should be given to this subject in the primary school. While he would not in the least neglect all proper attention to pronunciation in the primary schools, he would object to giving great attention to elegance of pronunciation in these schools, since there is so much to be learned by the young children that pertains to the matter of their future bread-and-butter. He desired rather that the greater stress of the teacher should be given to that instruction which will develop the power of the children, while teaching them those indispensable matters that will fit them to be intelligent, practical citizens—such instruction as Supt. Calkins has introduced into the primary schools of New York City.

The paper read by Dr. Samuel Eliot, Head Master of the Girl's High School, of Boston, upon "The Organization of School Faculties," took a novel position in the matter of the management of schools. The plan proposed, in brief, was for the teachers of a town or city to choose from their own ranks those of large and successful experience, who are capable to represent the best views in matters of education; that the School Committee, or Board of Education, shall appoint from this selection a "School Faculty," of which the Superintendent shall be the chairman, to advise and co-operate with the School Committee, or Board of Education, in all matters pertaining to the course of study, text-books, plans of instruction, discipline, etc. It was urged in support of this plan, that no

one understands so well as the experienced and able teacher the educational needs of children in school, and therefore they should have a voice in arranging this part of the plans for the school management.

Miss Anna C. Brackett, of New York, read a spirited paper upon the "Relation of the Medical and the Teacher's Profession." She remarked that the teacher's profession regarded the body as the servant of the mind; while the medical profession looks upon the mind as the servant of the body. "From the nature of their special work, physicians are forced to this view. The two professions should unite in perfect harmony.

"If a child is ailing, the case is laid before the physician; in ninety-nine cases out of a hundred he recommends the withdrawal of the child from school. He does this without knowledge of the character of the school, without inquiry as to ventilation, recesses, ability, and wisdom of teachers; without knowledge of the clothing, sleep, food, and other habits of the child at home. It is easier to tell the parent that the child has been over-worked at school, than that her weak indulgence, and criminal ignorance, is the cause of the illness.

"The time will come when, in the treatment of school children, the physician will seek and receive information which the teacher only can give—when there shall be mutual and deserved respect, because of a more intimate knowledge. Then we shall hear less of illness of school children, because there will be less of it. We shall then hear less of the failure of school work, because we shall have better material, and the blame of poor results will be placed where it belongs."

Rev. A. D. Mayo, of Springfield, Mass., read an important paper advocating a short, practical course of common school instruction, better suited to the wants of the great mass of school children.

The closing address was by President Porter, of Yale College, upon "Classical Instruction."

At one o'clock P. M., on Friday, the meeting adjourned to the steamboat *Canonicus*, and the members, with their friends, were conveyed down Narragansett Bay to Rocky Point, where about 600 enjoyed an excellent clam-bake. This was followed by a further excursion on the Bay via Newport, Fall River, etc., returning to Providence at 9 o'clock in the evening.